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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/027,243

12/20/2001

Paul D. Beuther

KCX-448A (16482, 16483)

9070

7590

12/30/2003

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EXAMINER

MARTIR, LILYBETT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,243

Applicant(s)

BEUTHER ET AL.

Examiner

Lilybett Martir

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luukala et al. (Pat. 4,833,928).

- With respect to claim 1, Luukala et al. teaches providing a web as in element 1, moving at a determined speed, and having a determined basis weight; creating a wave in the moving web; determining the speed of the propagation of the wave; and determining the tension of the web through a mathematical relationship between the wave speed, basis weight and speed of the web (Col. 5-6, lines 55-56 and lines 67-4).
Luukala fails to specifically disclose the existence of an instability index of the web that is greater or equal to 0.5. One can assume, based in the fact that no clear definition of the instability index is not provided, that Luukala et al. is capable of having one and must have one. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the web tension measuring method of Luukala et al. by choosing a specific instability index and assuring that his teachings have a property of instability based

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on the data being obtained and manipulated, since there is no clear definition in the language of the claim about what the term instability is referring to, and therefore the existence of said property in his teachings can be assumed as being an essential constituent of his teachings.

- With respect to claim 2, Luukala fails to specifically disclose the tensions being detected by his arrangement, the speed of the wave and the basis weight of the web that his arrangement has. Since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)); it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the web tension measuring method of Luukala et al. by choosing a specific tensions being detected by his arrangement, the speed of the wave and the basis weight of the web to make his method and the measurements made by them more accurate and precise.

With respect to claim 3, Luukala fails to specifically disclose an instability index that is greater than 0.8. Since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)), it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the web tension measuring method of Luukala et al. by choosing a specific instability

index and assuring that his teachings have a property of instability based on the data being obtained and manipulated, since there is no clear definition in the language of the claim about what the term instability is referring to, and therefore the existence of said property in his teachings can be assumed as being an essential constituent of his teachings.

- With respect to claim 4, Luukkala et al. teaches that the utilization of an air pulse to create a wave is commonly known in the art (Col. 1, lines 34-37). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the tension-measuring device of Luukkala et al. by using the knowledge commonly available in the art by utilizing alternate commonly known compressed air blowing means to measure the tension of a web to therefore produce a burst in a well known way that does not depart from the scope of Luukkala's teachings rendering said device functional under circumstances where a loudspeaker or equivalent would not perform appropriately.
- With respect to claim 5, Luukkala et al. teaches determining the speed of the wave by utilizing laser displacement transducers as in element 5 that provides a signal. Luukkala et al. fails to specifically teach the utilization of two lasers. Since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (St. Regis Paper Co. v. Bemis Co., 193 USPQ 8), it would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to modify the tension-measuring device of Luukkala et al. by duplicating the amount of transducers being utilized in his arrangement to further increase the reliability and the accuracy of his arrangement by duplicating the amount of data that the arrangement can retrieve.

Allowable Subject Matter

3. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the limitations of said claims are inserted upon the base claim, including all of the limitations of the base claim and any intervening claims. Claims 16-19 are allowed. The following is an examiner's statement of reasons for allowance: In claim 16, the step of determining the instability index of the web in combination with all the other limitations as claimed are neither taught nor disclosed in any piece of available prior art.. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 9:00 AM to 5:30 PM.

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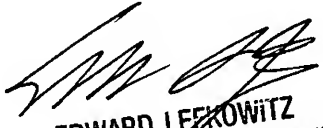
5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (703)305-4816. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3432.

6. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

CM

Lilybett Martir
Examiner
Art Unit 2855

LCM


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800